



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,499	02/21/2001	Izumi Miyake	0879-0300P	6705

2292 7590 11/17/2005

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

ONUAKU, CHRISTOPHER O

ART UNIT	PAPER NUMBER
----------	--------------

2616

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/788,499	Applicant(s) MIYAKE, IZUMI	
	Examiner Christopher Onuaku	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-15 and 19-22 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the art rejections only to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4&16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (US 5,671,451) in view of Hamano et al (US 5,604,928).

Regarding claim 1, Takahashi et al disclose in Fig.1,2(a)&2(b) a data recording unit in use with a camera related to a camera having therein a function of information recording capable of recording, on a recording medium such as a film, photographing-state-related information of a camera relevant to photographing state such as a photographing position of a camera and photographing time and photographing related information of a camera related to photographing drive control of a camera, together with photographed images, by use of a satellite positioning system represented by GPS (Global Positioning System comprising:

a) image pickup forming image light representing a subject on a light receiving surface of an image pickup element, and converting the image light into an image signal (see Fig.1,2(a)&2(b); camera in the camera section 1 conducting photographing; col.5, lines 5-35);

b) a GPS unit which is built in the camera and to which electricity is supplied from a common batter with the camera (see Global Positioning System comprising the GPS receiver 2 and the camera section 1 wherein the GPS and the camera unit are powered from the common battery chamber 7; col.5, lines 15-25);

c) measurement data receiver receiving measurement data obtained by the GPS unit; (see CPU2/CPU 31 of Fig.1; col.6, lines 1-13);

d) recorder recording the measurement data received by the measurement data receiver and the image signal obtained by the image pickup on a recording medium (see recording unit; col.6, lines 1-13).

Takahashi et al fail to explicitly disclose control means for stopping elements of the camera from generating noise that interferes with the GPS unit while the GPS unit is obtaining the measurement data to be recorded, the elements generating the noise comprising at least one of the image pickup and the recorder.

In similar field of endeavor, Hamano et al teach a radio transmit-receive unit 3 which can perform the communication processing stably without being affected by high frequency noise with the system activation of a computer unit, whereby if a communication processing request from the radio transmit-receive unit 3 occurs, control means (computer 1) sets the system state of a sub-CPU 2 being activated to a rest

Art Unit: 2616

state, a counter 16 starts clocking the signal receive time of the radio transmit-receive unit 3 when the system state of the sub-CPU 2 is in a rest state, and a latch circuit holds electric field strength information of carrier received by the radio transmit-receive unit 3 upon the termination of clocking by the counter 16 and the computer unit 1 switches the system state of the sub-CPU 2 being at rest to an active state, based on the end state of clocking by the counter 16 to restart the activation of the sub-CPU 2, whereby the radio transmit-receive unit 3 can perform the communication processing stably, without being affected by high frequency noise arising with the system activation of the sub-CPU 2 (see col.4, line 29 to col.5, line 48). Thus, Hamano et al teaches a control unit (computer unit 1) deactivating a computer unit (sub-CPU 2) when the transmit-receive unit 3 is performing communication processing in order to avoid being affected by high frequency noise with the system activation of the computer unit (sub-CPU).

It would have been obvious to one of ordinary skill in the art to modify Takahashi by realizing Takahashi with a control means that would allow Takahashi to utilize the principle, as taught by Hamano et al, of deactivating (stopping) a means that can generate interference (e.g., noise) that would interfere with the temporary processing of another unit (for example, measurement data calculation by the G.P.S. unit), until the required processing is completed, in order to avoid noise (for example) interfering with the process.

Regarding claim 3, Takahashi et al disclose wherein the measurement data receiver repeatedly receives the measurement data from the G.P.S. unit at a "predetermined cycle" to thereby renew the measurement data (see col.7, lines 36 to col.8, line 22).

Regarding claim 2&4, Takahashi et al disclose wherein measurement data receiver receives the measurement data to be recorded from the GPS unit (see Fig.2(a); GPS receiver and sensor section 2 “before”/”after” photographing (see Fig.4&5; col.7, line 13 to col.8, line 47).

Regarding claim 16, Takahashi et al further show in Fig.1,2(a)&2(b) the image pickup (see camera section 1), the measurement data receiver receiving measurement data obtained by the GPS unit (see CPU 31/CPU 2 of Fig.1; col.6, lines 1-13), recorder(see recording unit; col.6, lines 1-23) are all part of the camera system.

Furthermore, as shown in Claim 1 above, Hamano teaches the principle of deactivating (stopping) a means that can generate interference (i.e., noise) that would interfere with the temporary processing of another unit (for example, measurement data calculation by the GPS unit), until the required processing is completed, in order to avoid noise, for example, from interfering with the process.

From the above discussion, Takahashi has shown that the camera section, the measurement data receiver and the recorder can be built into the camera system.

Therefore, it would have been obvious to further modify the camera system of Takahashi et al by adding the controller of Hamano to Takahashi et al, in order to combine the functioning units of the camera system of Takahashi et al into one camera system, thereby expanding the capability of the camera system of TAKAHASHI ET AL

Art Unit: 2616

4. Claims 5,6,17&18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of Hamano and further in view of Ishii et al(US 5,410,225).

Regarding claim 5, the claimed limitations of claim 5 are accommodated in the discussions of claim 1 above. Furthermore, Takahashi now modified with Hamano, discloses G.P.S. unit and the claimed "control unit" for stopping "elements on the camera" (or means) from generating noise interfering with the G.P.S. unit while the G.P.S. unit is obtaining the measurement data to be recorded. Takahashi and Hamano fail to disclose the claimed strobe unit. Ishii et al teach, in the same field of endeavor, in Fig.2 a video camera having light emission means such as a strobe 9 which illuminates a foreground object with light emitted by the strobe. It would have been obvious to one of ordinary skill in the art to further modify Kuo by adding a strobe unit, as taught by Ishii, to provide the emission of strobe light. Furthermore, with Kuo now modified by adding the strobe unit of Ishii,

It would have been obvious to further modify the control means of Takahashi by applying to the control means of Takahashi the same principle, as taught by Hamano, of a control means stopping means (e.g., strobe unit) that generate interference (e.g., noise) that would interfere with the temporary processing of another unit (for example, measurement data calculation by the G.P.S. unit), until the required processing is completed, in order to avoid noise from the strobe unit (for example) from interfering with the process (e.g., the GPS unit obtaining measurement data).

Regarding claim 6, the claimed limitations of claim 6 are accommodated in the discussions of claim 1 above, except the claimed outputting the image signal obtained by the image pickup to an image display which is connected to the camera or which is built in

Art Unit: 2616

the camera, the display functioning as a finder. Ishii further teaches and electronic viewfinder (EVF) 30 for outputting image signal obtained by the image pickup to an EVF 30 which is connected to the CCD solid state image pickup device (or camera) 12 (see Fig.2; col.6, lines 12-27; col.9, lines 26-31 and col.13, lines 20-28).

It further would have been obvious to further modify the control means of Takahashi by applying to the control means of Takahashi the same principle, as taught by Hamano, of a control means stopping means (e.g., a display unit) that generate interference (e.g., noise) that would interfere with the temporary processing of another unit (for example, measurement data calculation by the G.P.S. unit), until the required processing is completed, in order to avoid noise from the display unit (for example) from interfering with the process (e.g., the GPS unit obtaining measurement data).

Regarding claim 17, Takahashi et al further show in Fig.1,2(a)&2(b) the image pickup (see camera section 1), the measurement data receiver receiving measurement data obtained by the GPS unit (see CPU 31/CPU 2 of Fig.1; col.6, lines 1-13), recorder(see recording unit; col.6, lines 1-23) are all part of the camera system.

Furthermore, as shown in Claim 1 above, Hamano teaches the principle of deactivating (stopping) a means that can generate interference (i.e., noise) that would interfere with the temporary processing of another unit (for example, measurement data calculation by the GPS unit), until the required processing is completed, in order to avoid noise, for example, from interfering with the process.

And, in claim 5 above, Ishii et al teach, in the same field of endeavor, in Fig.2 a video camera having light emission means such as a strobe 9 which illuminates a foreground object with light emitted by the strobe

From the above discussion, Takahashi has shown that the camera section, the measurement data receiver and the recorder can be built into the same camera system.

Therefore, it would have been obvious to further modify the camera system of Takahashi et al by adding the controller of Hamano and the strobe light of Ishii to Takahashi et al, in order to combine the functioning units of the camera system of Takahashi et al into one camera system, thereby expanding the capability of the camera system of Takahashi et al.

Regarding claim 18, Takahashi et al further show in Fig.1,2(a)&2(b) the image pickup (see camera section 1), the measurement data receiver receiving measurement data obtained by the GPS unit (see CPU 31/CPU 2 of Fig.1; col.6, lines 1-13), recorder(see recording unit; col.6, lines 1-23) are all part of the camera system.

Furthermore, as shown in Claim 1 above, Hamano teaches the principle of deactivating (stopping) a means that can generate interference (i.e., noise) that would interfere with the temporary processing of another unit (for example, measurement data calculation by the GPS unit), until the required processing is completed, in order to avoid noise, for example, from interfering with the process.

As shown in claim 6 above, Ishii further teaches an electronic viewfinder (EVF) 30 for outputting image signal obtained by the image pickup to an EVF 30 which is connected

Art Unit: 2616

to the CCD solid state image pickup device (or camera) 12 (see Fig.2; col.6, lines 12-27; col.9, lines 26-31 and col.13, lines 20-28).

From the above discussion, Takahashi has shown that the camera section, the measurement data receiver and the recorder can be built into the same camera system.

Therefore, it would have been obvious to further modify the camera system of Takahashi et al by adding the controller of Hamano and the electronic view finder (EVF) of Ishii to Takahashi et al, in order to combine the functioning units of the camera system of Takahashi et al into one camera system, thereby expanding the capability of the camera system of Takahashi et al.

Allowable Subject Matter

5. Claims 7-15&19-22 are allowable over the prior art of record.
6. The following is a statement of reasons for the indication of allowable subject matter.

Regarding claim 7, the invention relates to a camera which records a picked-up image and positional data which is obtained by the global positioning system (GPS) during photographing.

The closest references Kuo (US 5,596,494) teaches a method and apparatus to acquire instantaneous terrestrial images and the absolute geophysical coordinate information for terrestrial objects within the captured images simultaneously and with a high degree of accuracy, and Hamano et al (US 5,604,928) teach a portable electronic device having computer unit for performing data processing of desired information with radio communication.

However, Kuo and Hamano et al fail to explicitly disclose a camera, where the camera comprises an image regenerator reading the image signal recorded on the recording medium and outputting the image signal to an image display which is connected to the camera or which is built in the camera, to thereby display an image represented by the image signal, a mode switch switching between a photographing mode in which the image pickup and the recorder are activated, and a regeneration mode in which the image regenerator is activated, and a controller stopping the GPS unit when the regeneration mode is selected by the mode switch so as to inhibit electricity consumption.

Regarding claim 8, the invention relates to a camera which records a picked-up image and positional data which is obtained by the global positioning system (GPS) during photographing.

The closest references Kuo (US 5,596,494) teaches a method and apparatus to acquire instantaneous terrestrial images and the absolute geophysical coordinate information for terrestrial objects within the captured images simultaneously and with a high degree of accuracy, and Hamano et al (US 5,604,928) teach a portable electronic device having computer unit for performing data processing of desired information with radio communication.

However, Kuo and Hamano et al fail to explicitly disclose a camera for optically or electrically recording an image representing a subject on a recording medium when a shutter is released, where the camera further comprises a decision unit deciding

Art Unit: 2616

whether the measurement data, received by the measurement data receiver, has an error or not, wherein the decision unit decides that the measurement data has an error when the measurement data transmitted by the GPS unit indicates that the GPS unit cannot obtain measurement data

Regarding claim 10, the invention relates to a camera which records a picked-up image and positional data which is obtained by the global positioning system (GPS) during photographing.

The closest references Kuo (US 5,596,494) teaches a method and apparatus to acquire instantaneous terrestrial images and the absolute geophysical coordinate information for terrestrial objects within the captured images simultaneously and with a high degree of accuracy, and Hamano et al (US 5,604,928) teach a portable electronic device having computer unit for performing data processing of desired information with radio communication.

However, Kuo and Hamano et al fail to explicitly disclose a camera, where the camera comprises a printer which is built in the camera and to which electricity is supplied from a common battery with the camera, an image signal output outputting one of the image obtained by the image pickup and an image signal read from the recording medium to the printer to thereby control the printer to print an image represented by one of the image signals and a controller prohibiting the measurement data receiver from receiving measurement data from the GPS unit while the image is being printed by the printer.

Regarding claim 15, the invention relates to a camera which records a picked-up image and positional data which is obtained by the global positioning system (GPS) during photographing.

The closest references Kuo (US 5,596,494) teaches a method and apparatus to acquire instantaneous terrestrial images and the absolute geophysical coordinate information for terrestrial objects within the captured images simultaneously and with a high degree of accuracy, and Hamano et al (US 5,604,928) teach a portable electronic device having computer unit for performing data processing of desired information with radio communication.

However, Kuo and Hamano et al fail to explicitly disclose a camera, where the camera comprises a printer which is built in the camera and to which electricity is supplied from a common battery with the camera, an image signal output outputting the image signal recorded by the recorder to the printer to control the printer to print the image represented by the image data, when a shutter switch is manipulated, and a controller controlling the measurement data receiver to receive second measurement data and controlling the recorder to record the second measurement data after the image is printed by the printer, if the measurement data receiver has not received the first measurement data when the recorder records the image signal.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Onuaku whose telephone number is 571-272-7379. The examiner can normally be reached on M-F.


Art Unit: 2616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


COO

11/10/05


James J. Groody
Supervisory Patent Examiner
Art Unit 262 2616